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# Political Power of the Czech Representatives in the European Parliament

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## 1 Introduction

The Czech Republic officially entered the European Union on May 1, 2004. The first Czech election to the European Parliament was held in June 2004. Since that time, the Czech Republic has 24 representatives in the European Parliament, which is the only directly elected parliamentary institution of the European Union. Members of the European Parliament can be organized into different parliamentary groups; members can stay non-attached members – “*non-inscrits*”. The political power of different countries and political groups is dependent on the number of its representatives. This power can differ from the influence of countries and national political parties with respect to created coalitions.

Therefore, the main aim of this article is to compare the power of the Czech representatives in the European Parliament with the power of representatives from other countries, and to compare the power of the Czech political parties in the Lower House of the Czech Parliament with the power of parties’ representatives as European parliamentary political group’s members.

The text is organized as follows: two next sections give a description of the composition of the European Parliament and the Lower House of the Czech Parliament in April 2008. The fourth section gives an explanation of the power index computation. The results and discussion are given in the fifth section. In the references, we cover also the Internet sources to the parliamentary institutions of the European Parliament and the Czech Parliament.

## 2 Situation in the European Parliament (April 2008)

Since the elections in June 2004, the European Parliament is composed of 785 Members of the European Parliament (MEP). All states are allocated seats according to population. Composition of the European Parliament with respect to country representatives is given in Table 1.

Moreover, MEPs in Parliament are organized into seven different parliamentary groups. Members, who are not members of any group, are called “*non-inscrits*”. List of European political groups with common abbreviations and number of MEPs in political groups are given in Table 2. We have to mention, that two largest political groups are holding 503 seats, so they have more than 60% of all seats. There is a strong group of “*non-inscrits*” usually covering about 30 MEPs, however they are expected not to act simultaneously, therefore their power should be neglecting.

The Czech Republic is represented by 24 elected members of European Parliament; 23 of the Czech representatives are members of political groups, one MEP representing the Czech Republic is non-attached member. All representatives of the Czech Republic were elected with respect to their party affiliation in the home country. List of the Czech MEPs with their political group membership and the Czech political party they are represented is given in Table 3.

Country	Seats	Country	Seats
Germany	99	Austria	18
France	78	Bulgaria	18
United Kingdom	78	Finland	14
Italy	78	Denmark	14
Poland	54	Slovakia	14
Spain	54	Ireland	13
Romania	35	Lithuania	13
Netherlands	27	Latvia	9
Belgium	24	Slovenia	7
Czech Republic	24	Cyprus	6
Greece	24	Estonia	6
Hungary	24	Luxembourg	6
Portugal	24	Malta	5
Sweden	19		

**Table 1: Number of countries' representatives in the European Parliament**

<b>Group of the European People's Party (Christian Democrats) and European Democrats</b>	EPP-ED	288
<b>Socialist Group in the European Parliament</b>	PES	215
<b>Group of the Alliance of Liberals and Democrats for Europe</b>	ALDE	101
<b>Union for Europe and the Nations Group</b>	UEN	44
<b>Group of the Greens/European Free Alliance</b>	G-EFA	42
<b>Confederal Group of the European United Left - Nordic Green Left</b>	GUE-NGL	41
<b>Independence/Democracy Group</b>	ID	24
<b>Non-attached members</b>	NI	30

**Table 2: Political Groups operating in the European Parliament (April 2008).**

Name	Political Party in the CR	Political group in the EP	Name	Political Party in the CR	Political group in the EP
ZAHRADIL, Jan	ODS	EPP-ED	ROITHOVÁ, Zuzana	KDU-ČSL	EPP-ED
OUZKÝ, Miroslav	ODS	EPP-ED	BŘEZINA, Jan	KDU-ČSL	EPP-ED
CABRNOCH, Milan	ODS	EPP-ED	FALBR, Richard	ČSSD	PES
DUCHOŇ, Petr	ODS	EPP-ED	ROUČEK, Libor	ČSSD	PES
FAJMON, Hynek	ODS	EPP-ED	RANSDORF, Miloslav	KSČM	GUE-NGL
ŠKOTTOVÁ, Nina	ODS	EPP-ED	MAŠTÁLKA, Jiří	KSČM	GUE-NGL
STREJČEK, Ivo	ODS	EPP-ED	FLASAROVÁ, Věra	KSČM	GUE-NGL
VLASÁK, Oldřich	ODS	EPP-ED	KOHLÍČEK, Jaromír	KSČM	GUE-NGL
ZVĚŘINA, Jaroslav	ODS	EPP-ED	REMEK, Vladimír	KSČM	GUE-NGL
ZIELENIEC, Josef	SNK-ED	EPP-ED	STROŽ, Daniel	KSČM	GUE-NGL
ZATLOUKAL, Tomáš	SNK-ED	EPP-ED	ŽELEZNÝ, Vladimír	Indep.	ID
HYBÁŠKOVÁ, Jana	SNK-ED	EPP-ED	BOBOŠÍKOVÁ, Jana	Indep.	NI

**Table 3: Czech representatives in the European Parliament with their party affiliation and the EP political group membership (April 2008).**

For computation of relative power indices we have to use the relative representation of MEPs with respect to the country they represent and political group they are

members. This information is given in Table 4, the source of the table is the official EP web site <http://www.europarl.europa.eu/members/expert.do?language=EN>.

	EPP-ED	PES	ALDE	UEN	G-EFA	GUE-NGL	ID	NI	Total
Germany	49	23	7	0	13	7	0	0	99
France	18	31	10	0	6	3	3	7	78
United Kingdom	27	19	11	0	5	1	10	5	78
Italy	24	15	14	13	2	7	0	3	78
Poland	15	9	5	20	0	0	3	2	54
Spain	24	24	2	0	3	1	0	0	54
Romania	18	10	6	0	0	0	0	1	35
Netherlands	7	7	5	0	4	2	2	0	27
Belgium	6	7	6	0	2	0	0	3	24
Czech Republic	14	2	0	0	0	6	1	1	24
Greece	11	8	0	0	0	4	1	0	24
Hungary	13	9	2	0	0	0	0	0	24
Portugal	9	12	0	0	0	3	0	0	24
Sweden	6	5	3	0	1	2	2	0	19
Austria	6	7	1	0	2	0	0	2	18
Bulgaria	5	5	5	0	0	0	0	3	18
Finland	4	3	5	0	1	1	0	0	14
Denmark	1	5	4	1	1	1	1	0	14
Slovakia	8	3	0	0	0	0	0	3	14
Ireland	5	1	1	4	0	1	1	0	13
Lithuania	2	2	7	2	0	0	0	0	13
Latvia	3	0	1	4	1	0	0	0	9
Slovenia	4	1	2	0	0	0	0	0	7
Cyprus	3	0	1	0	0	2	0	0	6
Estonia	1	3	2	0	0	0	0	0	6
Luxembourg	3	1	1	0	1	0	0	0	6
Malta	2	3	0	0	0	0	0	0	5
<b>Total</b>	<b>288</b>	<b>215</b>	<b>101</b>	<b>44</b>	<b>42</b>	<b>41</b>	<b>24</b>	<b>30</b>	<b>785</b>

Table 4: Distribution of MEP with respect to country and political group membership.

### 3 Situation in the Czech Parliament (April 2008)

Our analysis will be based on the comparison of our representatives in the European Parliament and in the Lower House of the Czech Parliament. Generally, the deputies of the Chamber of Deputies (Lower House) are elected on the basis of universal, equal, and direct secret ballot voting according to the principles of proportional representation. Elected are primarily political parties and members of the Chamber of Deputies are selected from the list of candidates. Votes in elections are counted, and parties which receive less than 5 % votes are eliminated. This is a reason, why there are Czech representatives in the European Parliament, which are not members of any parliamentary political party. This is the case of members of the Union of Independents-European Democrats.

Elections to the Lower House of the Czech Parliament were held in June 2006. Five political parties are operating in the Czech Parliament. However, since 2006 three candidates of the Czech Social Democrats became unaffiliated members. The actual composition of the Lower House is given in Table 5.

Civic Democratic Party	ODS	81
Czech Social Democratic Party	ČSSD	71
Communist Party of Bohemia and Moravia	KSČM	26
Christian and Democratic Union – Czechoslovak People's Party	KDU-ČSL	13
Green Party	SZ	6
Unaffiliated members	indep.	3

Table 5: Composition of the Lower House of the Czech Parliament (April 2008)

#### 4 Power indices

The power evaluation of MEP is done using a Shapley-Shubik power index. The Shapley-Shubik power index is derived from the model of bargaining, where the power index takes all possible preferences' allocations. This power index is given by Shapley value reduced to simple game approach. Notation: let  $\varphi_i(q; w)$  denotes the share of power that power index grants to the  $i$ -th member of a committee with allocation of weights  $w$  and quota  $q$ . The Shapley-Shubik power index:

$$\varphi_i(q; w) = \sum_{w(i)}^{\rightarrow} \frac{(t-1)!(n-t)!}{n!}$$

where the summation is taken over the set of the vulnerable coalitions for which a player  $i$  is essential (that means that  $S$  is winning such that  $S \setminus \{i\}$  is not winning);  $t$  is the number of elements (cardinality) of such set.

Now let us consider two level process: a first level inter-union committee game  $[q; t_1, t_2, \dots, t_m] = [q, \mathbf{t}]$  with the power of  $j$ -th coalition  $\pi_j[q, \mathbf{t}]$  and  $m$  internal union second level subgames  $[q; t_1, \dots, t_{j-1}, \mathbf{w}^j, t_{j+1}, \dots, t_m]$  with the power index of  $i$ -th member of the  $j$ -th coalition  $\pi_{ij}[q, \mathbf{t}, \mathbf{w}^j]$ . Then the power index of the member  $i$  of the union  $j$  in the committee with a priori union structure:

$$\pi_i(q; w, t) = \pi_j(q; t) \cdot \frac{\pi_{ij}(q; t, w^j)}{\sum_k \pi_{,k}(q; t, w^j)}$$

where  $k$  is going through all members in union  $j$ .

Another possibility how to measure influence of member states with respect to number of inhabitants in the state is to use the index of advantage. This index was described in Fowler, Polhuis, Paine (1983):

$$Advantage_i = \frac{\% \text{ total seats held by country } i}{\% \text{ population residing in country } i}$$

We used similar index of the power advantage that relates Shapley Shubik power index to the country population.

$$Power \text{ advantage}_i = \frac{\text{power index}}{\% \text{ population residing in country } i}$$

All results are given in the next part of this article.

#### 5 Results and Discussion

To compute the Shapley-Shubik power index we used homemade Java applet. However, it is possible to find several applications that can compute power indices at Internet; two of them are given among Internet references.

Power indices of all members' countries with their advantage and power advantage indices are given in Table 6.

State	Inhabitants (mil.)	Seats	Power index	Advantage	Power Advantage
Germany	82.4	99	0.1350	0.74	0.79
France	59	78	0.1027	0.81	0.84
United Kingdom	59.2	78	0.1027	0.81	0.84
Italy	57.4	78	0.1027	0.84	0.86
Poland	38.6	54	0.0687	0.86	0.86
Spain	41	54	0.0687	0.81	0.81
Romania	22.3	35	0.0435	0.97	0.94
Netherlands	16.1	27	0.0332	1.03	1.00
Belgium	10.3	24	0.0294	1.43	1.38
Czech Republic	10.2	24	0.0294	1.45	1.39
Greece	11	24	0.0294	1.34	1.29
Hungary	10	24	0.0294	1.48	1.42
Portugal	10	24	0.0294	1.48	1.42
Sweden	8.9	19	0.0231	1.31	1.25
Austria	8.1	18	0.0219	1.37	1.31
Bulgaria	7.9	18	0.0219	1.40	1.34
Finland	5.1	14	0.0169	1.69	1.60
Denmark	5.4	14	0.0169	1.60	1.51
Slovakia	5.4	14	0.0169	1.60	1.51
Ireland	3.9	13	0.0157	2.05	1.95
Lithuania	3.4	13	0.0157	2.35	2.23
Latvia	2.4	9	0.0108	2.31	2.17
Slovenia	2	7	0.0084	2.15	2.03
Cyprus	0.8	6	0.0072	4.61	4.34
Estonia	1.3	6	0.0072	2.84	2.67
Luxembourg	0.5	6	0.0072	7.38	6.94
Malta	0.4	5	0.0060	7.69	7.25
Total	483	785	1.0000		

**Table 6 Countries: Shapley Shubik power index, index of advantage and index of power advantage.**

From the results we can see, that the Shapley Shubik index of the Czech Republic is approximately 0.03, the same as the index of Belgium, Greece, Hungary, and Portugal. However, the advantage index and power advantage index is better for the Czech Republic than for Belgium and Greece, and worse than that of Hungary and Portugal. Naturally, smaller countries have higher advantage indices than bigger countries. The smallest advantage indices are that of Germany, the highest are indices for Malta – the smallest country of EU.

We wanted to compare also the power of political parties in the Chamber of Deputies in the Czech Parliament, and political groups in the European Parliament. Thus, the Shapley-Shubik power indices of the political parties from the Czech Parliament are given in Table 7 and power indices of the political groups of the European Parliament are given in Table 8.

Party	Seats	Power Index
ODS	81	0.3940
ČSSD	71	0.2369
KSČM	26	0.2369
KDU-ČSL	13	0.0607
SZ	6	0.0607
indep.	3	3x0.0036

**Table 7: Shapley-Shubik Power indices of political parties in the Lower House of the Czech Parliament**

Political Group	Seats	Power Index	Czech MEPs	Relative power
EPP-ED	288	0.4027	14	0.01958
PES	215	0.2015	2	0.00187
ALDE	101	0.1890	0	0.00000
UEN	44	0.0459	0	0.00000
G-EFA	42	0.0438	0	0.00000
GUE-NGL	41	0.0425	6	0.00622
ID	24	0.0349	1	0.00145
NI	30	30x0.0013	1	0.00004

**Table 8: Shapley-Shubik Power indices of political groups in the European Parliament.**

From the computed indices we can see, that two coalitional political parties – Civic Democratic Party (ODS) and Christian Democrats (KDU-CSL) have together power of 0.45. Czech representatives of both parties join EPP-ED, the party that received power about 0.403. Czech Social democrats (power index 0.24) join Party of European Socialists (power index 0.201) in the European Parliament. The biggest gap between power of representatives in the Czech and European Parliament is that in the case of the Czech Communist Party. The power index of KSCM in the Czech Parliament is approximately 0.24, while the political group of GUE-NGL has power index about 0.042.

Interesting point would be the computation of power indices of European political groups and relative power of Czech representatives in the groups using power indices with a-priori political structure. However, the number of combinations needed for computation exceeds possibility of computer time. Therefore, we tried to roughly estimate results using ratio of seats of the Czech representatives in the political group to the total seats the political group received. Results are given in Table 8.

## Conclusion

In this article, we computed the Shapley-Shubik power index, index of advantage and index of power advantage for the countries' representations in the European Parliament. We compared the power of the Czech representatives in the European Parliament with the power of representatives from other countries. We computed power indices of political parties in the Lower House of the Czech Parliament, power index of political groups in the European parliament and relative power of the Czech Representatives in the political groups of the EP. We compared the power of the Czech political parties and we found, that political parties of the Czech MEP's have equal power they have in the Czech republic with the exception of Communist Party.

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